

CLAIMS

1. A method of upgrading firmware on a computing device comprising:
determining a current version of firmware installed on the computing device;
5 searching a predesignated location for a firmware upgrade;
sending an email notification to one or more predesignated email addresses if
the firmware upgrade is found; and
installing the firmware upgrade onto the computing device.

10 2. A method as recited in claim 1, wherein the searching further
comprises:

comparing the current version of firmware with the firmware upgrade to
determine if the firmware upgrade will provide a more recent version of firmware.

15 3. A method as recited in claim 1, wherein the searching further
comprises initiating a browser application embedded on the computing device.

20 4. A method as recited in claim 3, wherein the browser application is
stored on and executes on a second computing device coupled to the computing
device.

5. A method as recited in claim 1, wherein installing the firmware
upgrade further comprises:

25 receiving a reply from a recipient of the email notification comprising a user-
designated time; and

at the user-designated time, downloading and installing the firmware upgrade
onto the computing device from the predesignated location.

6. A method as recited in claim 1, wherein the installing the firmware upgrade occurs automatically when the firmware upgrade is found.

5 7. A method as recited in claim 1, wherein the predesignated location is a plurality of predesignated locations comprising:

a URL address accessible via the Internet; and

a local server address accessible via a local network.

10 8. A method as recited in claim 1, wherein the one or more predesignated email addresses comprise a plurality of predesignated email addresses.

9. A method as recited in claim 1, wherein the email notification comprises:

15 a selectable option configured to automatically install the firmware upgrade onto the computing device; and

information comprising:

the current version of firmware;

the location of the firmware upgrade;

20 the cost associated with the firmware upgrade; and

billing data required to complete an electronic commerce transaction to purchase the firmware upgrade.

25 10. A method as recited in claim 1, wherein the computing device is embodied as a device selected from a group of devices comprising:

a printer;

a scanner;

a copier;
a facsimile machine;
a multifunction peripheral device;
a modem;
5 a cellular telephone;
a personal computer; and
a personal digital assistant (PDA).

10 11. A method as recited in claim 1, wherein the firmware is device driver software and the firmware upgrade is a device driver upgrade.

12. A computer-readable medium comprising computer executable instructions configured to cause a computer to perform the method of claim 1.

15 13. A computer-readable medium as recited in claim 12, wherein the computer executable instructions are further configured to cause a computer to perform the method of claim 1 automatically on a periodic basis.

20 14. A computer-readable medium as recited in claim 12, wherein the computer executable instructions are further configured to cause a computer to perform the method of claim 1 at the request of a user.

25 15. A method of upgrading firmware on a computing device comprising:
predesignating a server location to be searched for a firmware upgrade;
predesignating an email address to which an email notification will be sent
when the firmware upgrade is found;

receiving an email notification at the email address, the email notification comprising a selectable option configured to automatically install the firmware upgrade on the computing device from the server location.

5 16. A method as recited in claim 15, further comprising:
in response to a selection of the selectable option, requesting a time at which
the firmware upgrade will be automatically installed.

10 17. A method as recited in claim 15, further comprising:
in response to a selection of the selectable option, requesting billing data
required to complete an electronic commerce transaction to purchase the firmware
upgrade.

15 18. A method as recited in claim 15, wherein the predesignating a server
location comprises:
configuring an applet on the computing device with an address location on the
server.

20 19. A method as recited in claim 15, wherein the predesignating an email
address comprises:
configuring an applet on the computing device with an email address for
receiving an email notification.

25 20. A method as recited in claim 15, wherein the firmware is device driver
software and the firmware upgrade is a device driver upgrade.

21. A computing device comprising:

firmware stored in nonvolatile memory on the computing device; and

an upgrade applet configured to determine the current version of the firmware,
search a predesignated location for a firmware upgrade, send an email notification
5 regarding an available firmware upgrade, and install the available firmware upgrade
in the nonvolatile memory.

22. A computing device as recited in claim 21, wherein the email
notification comprises:

10 a selectable option to have the available firmware upgrade installed at a user-
designated time; and

information comprising:

the current version of the firmware; and

the location of the available firmware upgrade.

23. A computing device as recited in claim 22, wherein the email
notification further comprises:

information comprising:

a cost associated with the available firmware upgrade; and

20 billing data required to complete an electronic commerce transaction to
purchase the available firmware upgrade;

and wherein the selectable option comprises:

a second applet configured to browse to the predesignated location and
install the available firmware upgrade upon completion of the electronic commerce
25 transaction.

24. A computing device as recited in claim 21 embodied as a device selected from a group of devices comprising:

- a printer;
- a scanner;
- 5 a copier;
- a facsimile machine;
- a multifunction peripheral device;
- a modem;
- a cellular telephone;
- 10 a personal computer; and
- a personal digital assistant (PDA).

25. A computing device as recited in claim 21, wherein the nonvolatile memory comprises electrically erasable programmable read-only memory (EEPROM).

26. A system for upgrading firmware comprising:
a computing device having an upgrade applet configured to locate a firmware upgrade and send an email notification regarding the firmware upgrade; and
20 an email recipient configured to reply to the email notification, the reply comprising a user-designated time at which the upgrade applet will install the firmware upgrade onto the computing device.